The MESA 4I39 is a communication oriented programmable I/O card for the PC/104 bus. The 4I39 has 8 full duplex RS-422 /485 interfaces that are isolated from PC/104 ground and 24 general purpose TTL I/O pins.

The 4I39 uses a 200K gate Spartan2 FPGA. The FPGA is downloadable from the PC/104 bus side, allowing creation of almost any kind of specialized I/O function.

Several pre-made functions are provided, including a simple loopback function, 8 channel UART, SSI absolute encoder interface and others. VHDL source is provided for all examples.

The differential interfaces can be use in full duplex (RS-422) or half duplex (RS-485) modes. Differential I/O is galvanically isolated from system ground.

All TTL I/O bits are 5V tolerant and can sink 24 mA. Pullup resistors are provided for all pins so that they may be connected directly to opto-isolators, contacts etc.

4I39 TTL I/O uses a 50 pin connector with I/O module rack compatible pinouts and interleaved grounds, compatible with Mesa’s ‘Anything I/O ’ daughter cards.
ORDERING INFORMATION:
4I39 RS-422 FPGA CARD - COMMERCIAL TEMP RANGE
4I39-I RS-422 FPGA CARD - INDUSTRIAL TEMP RANGE

MESA ELECTRONICS 8/07